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REMARKSI. Introduction

In response to the Office Action dated September 26, 2006, claims 1, 2, 3, 7, 16, 19, 20, 21, 30, 34, 37, 38, 39, and 48 have been amended. Claims 1-17, 19-35, and 37-49 remain in the application. Re-examination and re-consideration of the application, as amended, are respectfully requested.

II. Claim Amendments

Applicant's attorney has made amendments to the claims as indicated above. These amendments were made solely for the purpose of clarifying the language of the claims, and were not required for purposes of patentability.

III. Allowable Subject Matter

On Page 25 of the Office Action, claims 13, 31, and 49 were considered allowable.

The Applicant thanks the Examiner and formally recognizes the allowable nature of these claims.

IV. The Cited References and the Subject InventionOffice Action Prior Art Rejections

On page (3), the Office Action rejected claims 1-5, 8-9, 15, 16, 19-23, 26-27, 34, 37-41, and 44-45 under 35 U.S.C. § 102(c) as anticipated by Amano et al., U.S. Patent No. 5,323,240 (Amano). On page (15), the Office Action rejected claims 11 and 47 under 35 U.S.C. §103(a) as being unpatentable over Amano in view of Bedard, U.S. Patent No. 5, 801,747 (Bedard). On page (16), the Office Action rejected claims 12 and 48 under 35 U.S.C. §103(a) as being unpatentable over Amano in view of Bedard and further in view of Candelore et al., U.S. Publication No. 2002/0104081 (Candelore). On page (17), the Office Action rejected claim 14 under 35 U.S.C. §103(a) as being unpatentable over Amano in view of Wugofski, U.S. Publication 2003/0056216 (Wugofski). On page (18), the Office Action rejected claims 17 and 35 under 35 U.S.C. §103(a) as being unpatentable over Amano in view of Wugofski, WO 99/35843 (Wugofski '843). On page (19), the Office Action rejected claim 32 under 35 U.S.C. §103(a) as being unpatentable over Amano in view of Bedard as applied to claim 24, and further in view of Wugofski. Also on page (19), the

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Office Action rejected claims 7, 25, and 43 under 35 U.S.C. §103(a) as being unpatentable over Amano in view of Trovato et al., U.S. Patent No. 6,445,306 (Trovato). On page (20), the Office Action rejected claims 6, 24, 33, and 42 under 35 U.S.C. §103(a) as being unpatentable over Amano in view of White, U.S. Publication No. 2002/0056098 (White). On page (22), the Office Action rejected claims 10, 28, and 46 under 35 U.S.C. §103(a) as being unpatentable over Amano in view of Bonomi et al., U.S. Patent No. 6,769,127 (Bonomi). On page (23), the Office Action rejected claim 29 under 35 U.S.C. §103(a) as being unpatentable over Amano in view of White and further in view of Bedard. On page (24), the Office Action rejected claim 30 under 35 U.S.C. §103(a) as being unpatentable over Amano in view of White and further in view of Bedard and Candelore. Applicant respectfully traverses these rejections in light of the amendments above and the arguments below.

A. The Amano Reference

U.S. Patent No. 5,323,240, issued June 21, 1994 to Amano et al. disclose a television receiver that automatically keeps track of favorite channels to facilitate tuning. A TV receiver has a tuner and a controller for controlling a tuning operation of the tuner. The controller includes a calculation unit for effecting a calculation of preferred stations using as parameters tuned channels and the times for which the channels are selected. A tuning frequency arrangement storing unit determines the channels that are frequently watched by a user on the basis of the calculation and stores indications of the channels. The channel indications thus stored are read out in ranked order to perform a tuning operation in response to successive actuation of a preferred-station key.

B. The Bedard Reference

U.S. Patent No. 5,801,747, issued September 1, 1998 to Bedard discloses a method and apparatus for creating a television viewer profile. A method and apparatus are disclosed for monitoring television viewing activity to determine preferred categories of programming and preferred channels of a viewer. To facilitate viewer access to preferred programming, the display of an electronic program guide may be configured in accordance with the monitored viewing activity to provide fast access to the preferred programming. The monitored viewing activity may also be used to provide a lock-out feature to prevent or limit the viewing of specified channels or categories of programming, or to identify and provide information of interest from the internet. In yet another embodiment of the invention, a viewer may automatically circulate through his or her preferred programming, as determined by monitoring the viewing activity of that viewer.

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C. The Candelore Reference

U.S. Publication No. 2002/0104081, issued August 1, 2002 to Candelore et al. disclose a method and system to maintain relative statistics for creating automatically a list of favorites. A method and system are disclosed in which a tuning event is detected. Relative statistics are maintained on one or more items related to the tuning event. A list of favorites is created automatically based on the maintained relative statistics. By using relative statistics, ranking of favorites can be maintained efficiently within limited system resources. Furthermore, a viewer can be presented with a selection of favorites based on a number of items without having to program manually the list of favorites.

D. The Wugofski Reference

U.S. Publication No. 2003/0056216, issued March 20, 2003 to Wugofski et al. disclose a system for managing favorite channels. A system for managing favorite channel lists on a television, personal computer or PC/TV convergence environment is disclosed. The favorite channel lists are dynamically created by a computerized system rather than manually created by a user who specifically identifies a set of channels to be included in the favorite channel list. In one embodiment of the invention, the computerized system generates a list of favorite channels based on a theme selected by the user. In another embodiment of the invention, the computerized system generates a list of favorite channels based on the channels most frequently viewed by the user.

E. The Wugofski '843 Reference

WO 99/35843, issued July 15, 1999 to Wugofski '843 discloses an Internet Source into TV program database. A computerized system for integrating Internet sources and television sources in a convergence system is disclosed.

F. The Trovato Reference

U.S. Patent No. 6,445,306, issued September 3, 2002 to Trovato et al. disclose a remote control program selection by genre. A remote control system in which a program-up or program-down activation on a control remote device effects the selection of the next or prior available channel that is likely to contain a program of a particular selected genre, or category. The system includes an identification of those programs that are likely to relate to each particular category.

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When the user selects a category, the user incrementally selects from the programs contained within the selected category. In the system, a list builder includes a number of capabilities for improving the selective quality of the program selection, having access, for example, to an information source that provides the time of each scheduled program on each channel, and an indication of each program's genre, rating, and other related items.

#### G. The White Reference

U.S. Publication No. 2002/0056098, issued May 9, 2002 to White discloses a web browser system for displaying recently viewed television channels. A system and method provides a way to display images of recently viewed television channels for the user's convenience. Multiple recently accessed television channels are stored in a list. Selecting channels in predefined ways causes the channels to be added to the list in an order in which they were accessed. Small screen images corresponding to a number of recently viewed television channels are displayed in a "recent channel" display screen. The small screen image for the channel being currently viewed is active and displays a live broadcast image, while the remaining small screen images display still images. A focus identifies the screen image of the currently active channel. The focus can be moved among the other small screen images within the recent channel display screen, wherein the channel corresponding to the currently focused image becoming the active channel.

#### H. The Bonomi Reference

U.S. Patent No. 6,769,127, issued July 27, 2004 to Bonomi et al. disclose a method and system for delivering media services and application over networks. A media system that centrally manages and stores media contents and also controls the delivery of media content to subscribers is disclosed. According to one aspect, an administrator can control program scheduling, rates, service packages and system configuration for a media delivery system. Additionally, the administrator may also control billing, transaction monitoring, and customer relations. According to another aspect, the media delivery system provides subscribers with centrally managed storage for paused or recorded media. Still another aspect is that the media delivery system can restrict various administrators to different modules of the media delivery system.

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### I. The Subject Invention

The present invention comprises methods and apparatuses for computing schedules of channels. An exemplary method in accordance with the present invention comprises accepting channel surfing commands having a series of commands to tune a plurality of channels sequentially from an ordered schedule of channels, determining a duration of a time period during which each channel in the plurality of channels is tuned by the series of commands, and prioritizing the schedule of channels according to the duration of the time period during which each channel in the plurality of channels is tuned by the series of commands.

The cited art does not teach nor suggest the limitations of the present invention. Specifically, the cited art does not teach nor suggest at least the limitations of determining a duration of a time period during which each channel in the plurality of channels is tuned by the series of commands, and prioritizing the schedule of channels according to the duration of the time period during which each channel in the plurality of channels is tuned by the series of commands, as recited in the claims of the present invention.

### The Primary Amano Reference

The primary Amano reference specifically states

First, when a channel key (hereinafter referred to as "Ch key") is input (manipulated) during the actuation of the TV receiver, an input channel is displayed (F10), and a count time in the time counting circuit 9a is cleared (F11). Thereafter, the time counting operation is started to count a watching time for the input channel until the F key or another channel key (F12) is input. The time counting circuit 9a is cleared when powered on, and its counting operation is started.

If the input of the F key or Ch key is judged (F13), the time counting circuit 9a ceases its time counting operation (F14), and the grade circuit 9b calculates the grade of a channel just before the input of the F key or Ch key on the basis of the watching time serving as a parameter which is counted by the time counting circuit 9a (F15). The sort circuit 9b re-sorts the renewed grade of the channel in ascending order (F16).

The renewed ranking of the channel is stored in the memory circuit 9d every renewing operation (F17). About ten rankings may be stored in the memory, however, the rankings of all channels may be stored in the memory.

As described above, the steps of F10 to F17 of the flowchart as shown in FIG. 3 are repeated every manipulation of the F key or Ch key to thereby enable the renewing operation of the ranking stored in the memory circuit 9d.

See Amano, Col. 3, lines 16-37.

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In other words, every time the channel is changed via the remote control, e.g., by use of the "F key" or the "Ch key," the ranking stored in the memory circuit is updated. A viewer can watch a first channel for an hour, and then change the channel to watch a second channel; that hour of viewing time will be added to the ranking of the first channel upon the channel change to the second channel, and the timer for the second channel will start to run.

Amano, as with the primary Candelore reference cited previously, disclose systems that generates a "favorites" list that presents the top ten channels based on total accumulated viewing time. Amano and Candelore-like systems are not new, and are acknowledged in the Applicant's specification at page 3, lines 21-22.

The Applicant's invention, as described in the claims, is fundamentally different than the Amano/Candelore systems. When expressed in words, the difference is subtle, but those words define a system distinctly different in operation and effect. The difference is perhaps most succinctly defined in terms of "channel surfing".

The Amano/Candelore systems do indeed collect statistics based on tuning events, and presents a "favorites list" based on those statistics. One might be tempted to dismiss the difference between direct channel entry and channel surfing as insignificant or obvious ... but in the context of generating a favorites list, this is not the case. A "favorites list" generated from a viewer's channel surfing habits would typically be distinctly different than the viewers television watching habits. For example, many television viewers turn a television on for background noise and watch it only intermittently if at all. Since the channel would remain selected for an extended period of time, this would cause the channel to be erroneously determined to be a "favorite" when in fact, the duration of the viewing is not indicative of the channel's "favorite" status. Further, channel surfing can be used to catch snippets of other shows, like scores on sports contests that can be determined quickly, while watching a dramatic or comedic show on another channel which requires more viewing time to catch a story line. Channel surfing, unlike television watching, is an activity in which the viewer is typically scanning the channels for a particular show to watch or a short snippet of information, and is actively involved in making rapid channel selection yea/nay decisions.

"Each Channel in the Plurality of Channels" is not taught by Amano

Applicant respectfully submits that this teaching is not the same as the recitation in the claims of determining a duration of a time period during which each channel in the plurality of channels is tuned by the series of commands as recited in the claims of the present invention.

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First, Amano does not teach that "each channel in the plurality of channels is tuned by the series of commands." As recited in previous responses, there is a difference between "watching television" and "channel surfing." Amano describes "watching television," where shows, favorite or not, are viewed for extended periods of time. As time elapses for those shows, the counter for each of those channels (frequencies) is increased and added to the prioritization list.

The Amano reference teaches that pressing the "T" key" at this point in time will then tune a viewer to a frequency that has been selected in an ordered list based on total viewing time, including the time spent watching the current show. As such, only two channels, the most recently viewed channel and the currently viewed channel, have been viewed.

The present invention, in contrast, describes tuning to each channel in the plurality of channels. The present invention describes tuning, in sequence (to each channel), through the entire sequence (in the plurality of channels) of ordered channels in a short period of time, e.g., during a commercial, during a period of non-interest in the current show, etc., to determine what programming is being shown on the other frequencies of typical interest. The current channel may or may not be in the plurality of channels; regardless, the viewing time currently being added by Amano is not being added by the present invention to the prioritization ordering. Instead, the present invention calculates the time spent on each frequency during these rapid frequency changes, not an extended watching time, and thus the present invention knows which of the frequencies is of most interest during a "channel surfing" sequence, rather than a "television watching" scenario.

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"Prioritizing the Schedule of Channels According to the Duration of the Time Period During which Each Channel in the Plurality of Channels is Tuned by the Series of Commands" is not taught by Amano

Further, Amano specifically teaches that the prioritization of the channels is performed directly after every channel change event (See Amano, Col. 3, lines 32-36, quoted above for convenience). This reorganizes the priority list every time a channel change occurs, regardless of the tuning command. For example, the tuning command in Amano could be to a channel that is not in the plurality of channels (which is typically done in a "television watching" scenario). Such a command is not tuning to a channel in the plurality of channels, nor is it one of the commands in the series of commands.

Again, the present invention teaches that the duration of the time period during which each channel in the plurality of channels is tuned by the series of commands ("channel surfing") is different than Amano. The present invention looks at the time period spent on each channel in the plurality of channels in a sequential run through the entire plurality of channels before updating the prioritization list. This is taught specifically in the specification as filed on page 6, line 8 through page 7, line 14. Amano does not contemplate such a scenario. In other words, the reorganization or reprioritization is done after the run through the entire plurality of channels, not inbetween each channel as in Amano.

Inherency "may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient." *Continental Can Co. v. Monsanto Co.*, 948 F.2d 1264, 1269 (Fed. Cir. 1991). Instead, to establish inherency, the extrinsic evidence "must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill." *Continental Can Co.*, 948 F.2d at 1268.

Amano cannot, as a matter of law, inherently anticipate the limitations of the present invention, because the missing descriptive matter is not present in the reference. As such, since the Office Action has not shown that the limitations of determining a duration of a time period during which each channel in the plurality of channels is tuned by the series of commands, and prioritizing the schedule of channels according to the duration of the time period during which each channel in the plurality of channels is tuned by the series of commands, as recited in the claims of the present invention is necessarily present in the reference of record, the Amano reference cannot anticipate, either directly or through inherency, the claims of the present invention.



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The ancillary references cited in combination with Amano, namely, the Bedard, Candelore, Wugofski, Wugofski '843, Trovato, White, and Bonomi references, do not remedy the deficiency in the primary Amano reference. Specifically, these references all act, essentially, as Amano does: tune to any channel for any length of time, start the counter, stop the counter when the viewer changes the channel. These are all "television watching" scenarios, not "channel surfing" scenarios. As such, the cited references, alone or in any combination, do not teach or suggest at least the limitations of determining a duration of a time period during which each channel in the plurality of channels is tuned by the series of commands, and prioritizing the schedule of channels according to the duration of the time period during which each channel in the plurality of channels is tuned by the series of commands, as recited in the claims of the present invention.

The various elements of the Applicant's claimed invention together provide operational advantages over the systems disclosed in Amano, Bedard, Candelore, Wugofski, Wugofski '843, Trovato, White, and Bonomi. In addition, Applicant's invention solves problems not recognized by Amano, Bedard, Candelore, Wugofski, Wugofski '843, Trovato, White, and Bonomi.

Accordingly, the Applicants respectfully suggest that the rejections under 35 U.S.C. § 102(e) and 103(a) be withdrawn.

V. Dependent Claims

Dependent claims 2-15, 17, 20-33, 35, and 38-49 incorporate the limitations of their related independent claims, and are therefore patentable on this basis. In addition, these claims recite novel elements even more remote from the cited references. Accordingly, the Applicant respectfully requests that these claims be allowed as well.

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VI. Conclusion

In view of the above, it is submitted that this application is now in good order for allowance and such allowance is respectfully solicited. Should the Examiner believe minor matters still remain that can be resolved in a telephone interview, the Examiner is urged to call Applicant's undersigned attorney.

Respectfully submitted,

Date: December 20, 2006

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